APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,171	07/02/2001	David L. Huie	9326.002.00	9506

30827   7590   04/23/2003

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC   20006

EXAMINER
TAYLOR, BARRY W

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 04/23/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/895,171	HUIE, DAVID L.
	Examiner	Art Unit
	Barry W Taylor	2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-80* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-80* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

1.   Claim 38 is recites the limitation "method of claim 23, wherein the allowed list" in

claim 38 line 4. There is insufficient antecedent basis for this limitation in the claim. It

appears that claim 38 should read "method of claim 37" verses 23 since claim 37

contains allowed list.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Akinpelu et al (5,475,749 hereinafter Akinpelu) in view of Bunge et al (5,896,447

hereinafter Bunge).

Regarding claim 1. Akinpelu discloses the U.S. telecommunications network is in

a state of transition. During the next several years it is expected that the monopoly held

by local exchange carriers will be substantially altered and that competitive access

providers (CAPs) will begin to offer customer access to the inter-exchange carriers,

local exchange service, or both. Akinpelu also discloses that in order to accomplish this

goal, location number portability is provided (columns 1-4 and figure 1). Akinpelu

discloses accommodates ported directory numbers via a location routing number (LRN)

scheme in which each central office switch in the public-switched telephone network is

identified by a unique set of "NPA-NXX" digits (columns 3-7).

However, Akinpelu is silent with respect to processing telephone numbers prior

to connecting the call. In other words, Akinpelu focuses on routing the telephone call to

ported directory number.

Bunge improves on the teachings of Akinpelu (columns 1-2) by obtaining LRN

data associated with a dialed directory number prior to initiating call blocking controls

(col. 2 lines 25-30). Bunge discloses all switches in the telecommunications system are

initialized with a call blocking control which utilizes an originating switch's query of a

number portability database prior to processing calls and as a result, LRN data

associated with ported directory numbers is retrieved, and analyzed, to determine

whether the ported directory number is actually subject to the initialized call blocking

control (columns 2-6).

Therefore, it would have been obvious for any one of ordinary skill in the art at

the time of the invention to modify the invention as taught by Akinpelu to initialize all

switches in the telecommunications system as taught by Bunge for the benefit of

retrieving and analyzing the LRN associated with the ported telephone number to

determine whether the ported telephone number is subject to initialized call blocking

control as taught by Bunge.

Regarding claims 2-3. Akinpelu does not explicitly show blocking ported number.

Bunge improves on the teachings of Akinpelu (columns 1-2) by obtaining LRN

data associated with a dialed directory number prior to initiating call blocking controls

(col. 2 lines 25-30). Bunge discloses all switches in the telecommunications system are

initialized with a call blocking control which utilizes an originating switch's query of a

number portability database prior to processing calls and as a result, LRN data

associated with ported directory numbers is retrieved, and analyzed, to determine

whether the ported directory number is actually subject to the initialized call blocking

control (columns 2-6).

Therefore, it would have been obvious for any one of ordinary skill in the art at

the time of the invention to modify the invention as taught by Akinpelu to initialize all

switches in the telecommunications system as taught by Bunge for the benefit of

retrieving and analyzing the LRN associated with the ported telephone number to

determine whether the ported telephone number is subject to initialized call blocking

control as taught by Bunge.

3.   Claims 11-15, 65, 70 and 80 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Akinpelu et al (5,475,749 hereinafter Akinpelu) in view of Atkins

(5,699,416).

Regarding claims 11, 65, 70 and 80. Akinpelu discloses the U.S.

telecommunications network is in a state of transition. During the next several years it

is expected that the monopoly held by local exchange carriers will be substantially

altered and that competitive access providers (CAPs) will begin to offer customer

access to the inter-exchange carriers, local exchange service, or both. Akinpelu also

discloses that in order to accomplish this goal, location number portability is provided

(columns 1-4 and figure 1). Akinpelu discloses accommodates ported directory

numbers via a location routing number (LRN) scheme in which each central office

switch in the public-switched telephone network is identified by a unique set of "NPA-

NXX" digits (columns 3-7).

However, Akinpelu is silent with respect to determining billing relationship

between carriers. In other words, Akinpelu focuses on routing the telephone call to

ported directory number.

Atkins improves on the teachings of Akinpelu (columns 1-8) wherein Akins

realizes that although Akinpelu application minimizes the overall inconvenience and

impact of number portability on the current network by using NPA-NXX digits to identify

central office switches that serve ported directory numbers, it does not address the

impact that number portability has on another important component of the network

which conventionally uses directory numbers for processing (column 2). Atkins

discloses, operator-assisted calls are handled by an operator services system (OSS) to

accommodate various call billing arrangements including calls billed to a called party (a

"collect call"), calls billed to a third party, and calls billed to a calling card and ported

directory numbers complicate OSS processing since billing verification is dependent

upon routing a billing validation request to a line identification (ID) database based on

the directory number to be billed (column 2). Therefore, Atkins discloses since

validating all types of billing to ensure receipt of revenue is a primary objective of every

service provider, the inability to bill and receive revenue for calls billed to ported

directory number accounts is an unacceptable result. To properly bill calls to ported

directory numbers accounts, an OSS must be capable of efficiently and accurately

determining the line ID database that contains the authorization for billing data

associated with the directory number account to be billed (columns 2-8). Subsequently,

a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120

figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu to include an

operator service system as taught by Atkins for the benefit of accommodating various

call billing arrangements as taught by Atkins, as well as, ultimately charging the ported

card directory number account.

Regarding claims 12-13. Akinpelu is silent with respect to determining billing

relationship between carriers.

Atkins improves on the teachings of Akinpelu (columns 1-8) wherein Akins

realizes that although Akinpelu application minimizes the overall inconvenience and

impact of number portability on the current network by using NPA-NXX digits to identify

central office switches that serve ported directory numbers, it does not address the

impact that number portability has on another important component of the network

which conventionally uses directory numbers for processing (column 2). Atkins

discloses, operator-assisted calls are handled by an operator services system (OSS) to accommodate various call billing arrangements including calls billed to a called party (a "collect call"), calls billed to a third party, and calls billed to a calling card and ported directory numbers complicate OSS processing since billing verification is dependent upon routing a billing validation request to a line identification (ID) database based on the directory number to be billed (column 2). Therefore, Atkins discloses since validating all types of billing to ensure receipt of revenue is a primary objective of every service provider, the inability to bill and receive revenue for calls billed to ported directory number accounts is an unacceptable result. To properly bill calls to ported directory numbers accounts, an OSS must be capable of efficiently and accurately determining the line ID database that contains the authorization for billing data associated with the directory number account to be billed (columns 2-8). Subsequently, a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120 figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a called party at telephone (182 figure 1) and the ported card directory number account is ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu to include an operator service system as taught by Atkins for the benefit of accommodating various call billing arrangements as taught by Atkins, as well as, ultimately charging the ported card directory number account.

Regarding claims 14-15. Akinpelu is silent with respect to collect and third party call.

Atkins improves on the teachings of Akinpelu (columns 1-8) wherein Akins realizes that although Akinpelu application minimizes the overall inconvenience and impact of number portability on the current network by using NPA-NXX digits to identify central office switches that serve ported directory numbers, it does not address the impact that number portability has on another important component of the network which conventionally uses directory numbers for processing (column 2). Atkins discloses, operator-assisted calls are handled by an operator services system (OSS) to accommodate various call billing arrangements including calls billed to a called party (a "collect call"), calls billed to a third party, and calls billed to a calling card and ported directory numbers complicate OSS processing since billing verification is dependent upon routing a billing validation request to a line identification (ID) database based on the directory number to be billed (column 2). Therefore, Atkins discloses since validating all types of billing to ensure receipt of revenue is a primary objective of every service provider, the inability to bill and receive revenue for calls billed to ported directory number accounts is an unacceptable result. To properly bill calls to ported directory numbers accounts, an OSS must be capable of efficiently and accurately determining the line ID database that contains the authorization for billing data associated with the directory number account to be billed (columns 2-8). Subsequently, a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120 figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu to include an

operator service system as taught by Atkins for the benefit of accommodating various

call billing arrangements as taught by Atkins.

4.   Claims 16-20, 66-69 and 71-74 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Akinpelu et al (hereinafter Akinpelu) in view of Atkins (5,699,416)

further in view of Bunge et al (5,896,447 hereinafter Bunge).

Regarding claims 16-17, 66-69 and 71-74. Akinpelu in view of Atkins is silent

with respect to blocking telephone number.

Bunge improves on the teachings of Akinpelu (columns 1-2) by obtaining LRN

data associated with a dialed directory number prior to initiating call blocking controls

(col. 2 lines 25-30). Bunge discloses all switches in the telecommunications system are

initialized with a call blocking control which utilizes an originating switch's query of a

number portability database prior to processing calls and as a result, LRN data

associated with ported directory numbers is retrieved, and analyzed, to determine

whether the ported directory number is actually subject to the initialized call blocking

control (columns 2-6).

Therefore, it would have been obvious for any one of ordinary skill in the art at

the time of the invention to modify the invention as taught by Akinpelu in view of Atkins

to initialize all switches in the telecommunications system as taught by Bunge for the benefit of retrieving and analyzing the LRN associated with the ported telephone number to determine whether the ported telephone number is subject to initialized call blocking control as taught by Bunge.

Regarding claims 18-19. Akinpelu is silent with respect to redirecting the telephone call to an operator.

Atkins also improves on the teachings of Akinpelu (columns 1-8) wherein Akins realizes that although Akinpelu application minimizes the overall inconvenience and impact of number portability on the current network by using NPA-NXX digits to identify central office switches that serve ported directory numbers, it does not address the impact that number portability has on another important component of the network which conventionally uses directory numbers for processing (column 2). Atkins discloses, operator-assisted calls are handled by an operator services system (OSS) to accommodate various call billing arrangements including calls billed to a called party (a "collect call"), calls billed to a third party, and calls billed to a calling card and ported directory numbers complicate OSS processing since billing verification is dependent upon routing a billing validation request to a line identification (ID) database based on the directory number to be billed (column 2). Therefore, Atkins discloses since validating all types of billing to ensure receipt of revenue is a primary objective of every service provider, the inability to bill and receive revenue for calls billed to ported directory number accounts is an unacceptable result. To properly bill calls to ported directory numbers accounts, an OSS must be capable of efficiently and accurately

determining the line ID database that contains the authorization for billing data

associated with the directory number account to be billed (columns 2-8). Subsequently,

a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120

figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu to include an

operator service system as taught by Atkins for the benefit of accommodating various

call billing arrangements as taught by Atkins.

Regarding claim 20. Akinpelu is silent with respect to CDR.

Atkins also improves on the teachings of Akinpelu (columns 1-8) wherein Akins

realizes that although Akinpelu application minimizes the overall inconvenience and

impact of number portability on the current network by using NPA-NXX digits to identify

central office switches that serve ported directory numbers, it does not address the

impact that number portability has on another important component of the network

which conventionally uses directory numbers for processing (column 2). Atkins

discloses, operator-assisted calls are handled by an operator services system (OSS) to

accommodate various call billing arrangements including calls billed to a called party (a

"collect call"), calls billed to a third party, and calls billed to a calling card and ported

directory numbers complicate OSS processing since billing verification is dependent

upon routing a billing validation request to a line identification (ID) database based on

the directory number to be billed (column 2). Therefore, Atkins discloses since

validating all types of billing to ensure receipt of revenue is a primary objective of every

service provider, the inability to bill and receive revenue for calls billed to ported

directory number accounts is an unacceptable result. To properly bill calls to ported

directory numbers accounts, an OSS must be capable of efficiently and accurately

determining the line ID database that contains the authorization for billing data

associated with the directory number account to be billed (columns 2-8). Subsequently,

a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120

figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu to include an

operator service system as taught by Atkins for the benefit of accommodating various

call billing arrangements as taught by Atkins, as well as, charging the ported card

directory number account.

5.   Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Akinpelu et al (hereinafter Akinpelu) in view of Bunge et al (5,896,447 hereinafter

Bunge) further in view of Atkins (5,699,416).

Regarding claims 4-6. Akinpelu in view of Bunge is silent with respect to

redirecting the telephone call to an operator.

Atkins also improves on the teachings of Akinpelu (columns 1-8) wherein Akins

realizes that although Akinpelu application minimizes the overall inconvenience and

impact of number portability on the current network by using NPA-NXX digits to identify

central office switches that serve ported directory numbers, it does not address the

impact that number portability has on another important component of the network

which conventionally uses directory numbers for processing (column 2). Atkins

discloses, operator-assisted calls are handled by an operator services system (OSS) to

accommodate various call billing arrangements including calls billed to a called party (a

"collect call"), calls billed to a third party, and calls billed to a calling card and ported

directory numbers complicate OSS processing since billing verification is dependent

upon routing a billing validation request to a line identification (ID) database based on

the directory number to be billed (column 2). Therefore, Atkins discloses since

validating all types of billing to ensure receipt of revenue is a primary objective of every

service provider, the inability to bill and receive revenue for calls billed to ported

directory number accounts is an unacceptable result. To properly bill calls to ported

directory numbers accounts, an OSS must be capable of efficiently and accurately

determining the line ID database that contains the authorization for billing data

associated with the directory number account to be billed (columns 2-8). Subsequently,

a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120

figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu in view of Bunge to include an operator service system as taught by Atkins for the benefit of accommodating various call billing arrangements as taught by Atkins.

Regarding claim 10. Akinpelu in view of Bunge is silent with respect to CDR.

Atkins also improves on the teachings of Akinpelu (columns 1-8) wherein Akins realizes that although Akinpelu application minimizes the overall inconvenience and impact of number portability on the current network by using NPA-NXX digits to identify central office switches that serve ported directory numbers, it does not address the impact that number portability has on another important component of the network which conventionally uses directory numbers for processing (column 2). Atkins discloses, operator-assisted calls are handled by an operator services system (OSS) to accommodate various call billing arrangements including calls billed to a called party (a "collect call"), calls billed to a third party, and calls billed to a calling card and ported directory numbers complicate OSS processing since billing verification is dependent upon routing a billing validation request to a line identification (ID) database based on the directory number to be billed (column 2). Therefore, Atkins discloses since validating all types of billing to ensure receipt of revenue is a primary objective of every service provider, the inability to bill and receive revenue for calls billed to ported directory number accounts is an unacceptable result. To properly bill calls to ported directory numbers accounts, an OSS must be capable of efficiently and accurately determining the line ID database that contains the authorization for billing data

associated with the directory number account to be billed (columns 2-8). Subsequently,

a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120

figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a

called party at telephone (182 figure 1) and the ported card directory number account is

ultimately charged for the call (column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu in view of Bunge to

include an operator service system as taught by Atkins for the benefit of

accommodating various call billing arrangements as taught by Atkins, as well as,

charging the ported card directory number account.

6.   Claims 21-64 and 75-79 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Akinpelu et al (hereinafter Akinpelu) in view of Atkins (5,699,416)

further in view of Winstead et al (6,430,274 hereinafter Winstead).

Regarding claims 21-24, 29-32, 37-39, 41-42, 44-47, 53, and 56-59. Akinpelu in

view of in view of Akins is silent with respect to detecting fraud related to collect and

third party calls.

Winstead teaches validation query based on supervisory signal wherein the

telephone system delays authorization validation queries until after a called party

accepts a telephone call. Winstead discloses that queries are avoided not only in cases

where the called party line is busy or not answering, but also in cases where the called

party declines to accept the charges (columns 1-10). Winstead discloses that while

Line Information Databases (LIDBs) reduce losses associated with alternative billing schemes, they come with a heavy price because every validation query, regardless of whether authorization is granted, the phone company is charged a query fee and for some telephone companies these fees can run into the tens of millions of dollars per month. Winstead discloses that correctional facilities are of great concern because a great number of "collect" calls are made from them and correctional facility phones are notoriously known for a high rate of premature terminated calls. Since each LIBs query is billable to the requesting telephone company, a large number of LIDB charges are incurred without a subsequent billable event. Therefore, when a caller initiates a collect call, a local Negative database is queried, then a local Fraud or BNS database query is executed, then followed by a query to an external LIDB. Winstead discloses that the present invention eliminates most if not all of the above-described unnecessary LIDB and Fraud database queries by delaying such queries at least until the called party accepts the collect call charges (columns 5-7).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu to include an operator service system as taught by Atkins that includes Fraud or BNS database authorization validation as taught by Winstead for the benefit of terminating collect calls before querying LIDBs thus saving the phone company from being charged a query fee.

Regarding claims 25, 33, and 40. Akinpelu is silent with respect to redirecting the telephone call to an operator.

Atkins also improves on the teachings of Akinpelu (columns 1-8) wherein Akins realizes that although Akinpelu application minimizes the overall inconvenience and impact of number portability on the current network by using NPA-NXX digits to identify central office switches that serve ported directory numbers, it does not address the impact that number portability has on another important component of the network which conventionally uses directory numbers for processing (column 2). Atkins discloses, operator-assisted calls are handled by an operator services system (OSS) to accommodate various call billing arrangements including calls billed to a called party (a "collect call"), calls billed to a third party, and calls billed to a calling card and ported directory numbers complicate OSS processing since billing verification is dependent upon routing a billing validation request to a line identification (ID) database based on the directory number to be billed (column 2). Therefore, Atkins discloses since validating all types of billing to ensure receipt of revenue is a primary objective of every service provider, the inability to bill and receive revenue for calls billed to ported directory number accounts is an unacceptable result. To properly bill calls to ported directory numbers accounts, an OSS must be capable of efficiently and accurately determining the line ID database that contains the authorization for billing data associated with the directory number account to be billed (columns 2-8). Subsequently, a billing record (i.e. CDR) relating to the call is created for delivery to billing system (120 figure 1) and in the case a call from the caller is routed via PSTN (190 figure 1), to a called party at telephone (182 figure 1) and the ported card directory number account is ultimately charged for the call (figures 1-2, column 5 line 50 – column 8 line 50).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu to include an operator service system as taught by Atkins for the benefit of accommodating various call billing arrangements as taught by Atkins.

Regarding claim 26 and 34. Akinpelu in view of in view of Akins is silent with respect to alternative billing.

Winstead teaches validation query based on supervisory signal wherein the telephone system delays authorization validation queries until after a called party accepts a telephone call. Winstead discloses that queries are avoided not only in cases where the called party line is busy or not answering, but also in cases where the called party declines to accept the charges (columns 1-10). Winstead discloses that while Line Information Databases (LIDBs) reduce losses associated with alternative billing schemes, they come with a heavy price because every validation query, regardless of whether authorization is granted, the phone company is charged a query fee and for some telephone companies these fees can run into the tens of millions of dollars per month. Winstead discloses that correctional facilities are of great concern because a great number of "collect" calls are made from them and correctional facility phones are notoriously known for a high rate of premature terminated calls. Since each LIBs query is billable to the requesting telephone company, a large number of LIDB charges are incurred without a subsequent billable event. Therefore, when a caller initiates a collect call, a local Negative database is queried, then a local Fraud or BNS database query is executed, then followed by a query to an external LIDB. Winstead discloses that the

present invention eliminates most if not all of the above-described unnecessary LIDB

and Fraud database queries by delaying such queries at least until the called party

accepts the collect call charges (columns 5-7).

Therefore, it would have been obvious to any one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Akinpelu to include an

operator service system as taught by Atkins that includes Fraud or BNS database

authorization validation as taught by Winstead for the benefit of terminating collect calls

before querying LIDBs thus saving the phone company from being charged a query fee.

Regarding claims 27-28, 35-36, 49-50, and 61-62. Akinpelu in view of in view of

Akins is silent with respect to name and address listed.

Winstead teaches validation query based on supervisory signal wherein the

telephone system delays authorization validation queries until after a called party

accepts a telephone call. Winstead discloses that queries are avoided not only in cases

where the called party line is busy or not answering, but also in cases where the called

party declines to accept the charges (columns 1-10). Winstead discloses that while

Line Information Databases (LIDBs) reduce losses associated with alternative billing

schemes, they come with a heavy price because every validation query, regardless of

whether authorization is granted, the phone company is charged a query fee and for

some telephone companies these fees can run into the tens of millions of dollars per

month. Winstead discloses that correctional facilities are of great concern because a

great number of "collect" calls are made from them and correctional facility phones are

notoriously known for a high rate of premature terminated calls. Since each LIBs query

is billable to the requesting telephone company, a large number of LIDB charges are incurred without a subsequent billable event. Therefore, when a caller initiates a collect call, a local Negative database is queried, then a local Fraud or BNS database query is executed, then followed by a query to an external LIDB. Winstead discloses that the present invention eliminates most if not all of the aboved-described unnecessary LIDB and Fraud database queries by delaying such queries at least until the called party accepts the collect call charges (columns 5-7).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu to include an operator service system as taught by Atkins that includes Fraud or BNS database authorization validation as taught by Winstead for the benefit of terminating collect calls before querying LIDBs thus saving the phone company from being charged a query fee.

Regarding claims 43, 51-52, 54, and 63-64. Winstead teaches validating credit account, credit history, credit score (col. 1 lines 19-67, col. 2 lines 1-67, col. 3 lines 1-67 and columns 5-8).

Regarding claims 48, 55, and 60. Winstead teaches validating credit account that inherently and/or obviously uses credit information before collect call is allowed to be made (col. 1 lines 19-67, col. 2 lines 1-67, col. 3 lines 1-67 and columns 5-8).

Regarding claims 75-79. Winstead teaches validating credit account, credit history, etc (col. 1 lines 19-67, col. 2 lines 1-67, col. 3 lines 1-67 and columns 5-8).

7.   Claims 7-9 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Akinpelu et al (hereinafter Akinpelu) in view of Bunge et al (5,896,447 hereinafter

Bunge) further in view of Atkins (5,699,416) and Winstead et al (6,430,274 hereinafter

Winstead).

Regarding claims 7-9. Akinpelu in view of Bunge further in view of Akins is silent

with respect to blocking collect calls.

Winstead teaches validation query based on supervisory signal wherein the

telephone system delays authorization validation queries until after a called party

accepts a telephone call. Winstead discloses that queries are avoided not only in cases

where the called party line is busy or not answering, but also in cases where the called

party declines to accept the charges (columns 1-10). Winstead discloses that while

Line Information Databases (LIDBs) reduce losses associated with alternative billing

schemes, they come with a heavy price because every validation query, regardless of

whether authorization is granted, the phone company is charged a query fee and for

some telephone companies these fees can run into the tens of millions of dollars per

month. Winstead discloses that correctional facilities are of great concern because a

great number of "collect" calls are made from them and correctional facility phones are

notoriously known for a high rate of premature terminated calls. Since each LIBs query

is billable to the requesting telephone company, a large number of LIDB charges are

incurred without a subsequent billable event. Therefore, when a caller initiates a collect

call, a local Negative database is queried, then a local Fraud or BNS database query is

executed, then followed by a query to an external LIDB. Winstead discloses that the

present invention eliminates most if not all of the aboved-described unnecessary LIDB and Fraud database queries by delaying such queries at least until the called party accepts the collect call charges (columns 5-7).

Therefore, it would have been obvious to any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Akinpelu in view of Bunge to include an operator service system as taught by Atkins to use a Fraud or BNS database authorization validation as taught by Winstead for the benefit of terminating collect calls before querying LIDBs thus saving the phone company from being charged a query fee.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600